

# Notice of Allowability

Application No.

10/508,754

Examiner

Nyeemah Grazier

Applicant(s)

O'SHEA ET AL.

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/18/06.
2. ☒ The allowed claim(s) is/are 27, 37-57 (renumbered as 1-22).
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### NOTICE OF ALLOWANCE

#### I. ACTION SUMMARY

The Amendments to the Claims, Remarks, and Declaration under 37 CFR 1.132 submitted to the Office on December 18, 2006 have been fully considered and will be the basis of the following Notice of Allowance.

Claims 27, 37-57, are currently pending and are in condition for allowance. Claims 1-26, 28-36, and 58-69 have been canceled.

#### II. RESPONSE TO AMENDMENTS

##### A. Rejection under 35 USC 103

Applicant's arguments and Declaration under 37 CFR §1.132 have been fully considered and are persuasive for the reasons set forth in the declaration. The rejection has been obviated in view of the Declaration and in further view of the Examiner's Amendment.

The instant pending claims were rejected and maintained in the Action dated October 17, 2006 as being obvious over (1) *Morgan et al.*, US Patent 5,446,157, (2) *Brinkley et al.*, US Patent 5,326,692 and (3) JP 11092479.

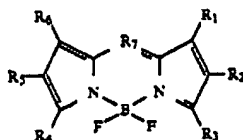
##### *Morgan et al.*

The rejection over *Morgan et al.* is withdrawn because the *Morgan et al.* patent teaches away from the invention as the *Morgan et al.* patent states that the variable "X" in formula (c) is preferably CH and R26-R29 are preferably lower n-alkyl. The rejections over the *Brinkley et al.* reference and Japanese Patent JP 11092479 have been obviated by the Examiner's Amendment and the Declaration under 37 CFR §1.132.

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Brinkley et al.

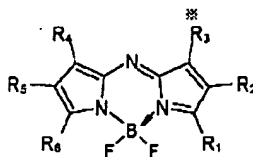
The instant invention is patentable over the *Brinkley et al.* reference because the reference relates to polymeric microparticles incorporating fluorescent dyes wherein the dye derive from polyazaindacene derivatives of formula (I). *See*, col. 8, ll. 32-55.



The  $R^7$  may represent nitrogen, methane, or halogen-, alkyl-, alkoxy, alkenyl, cycloalkyl, arylalkyl, acyl, aryl, or heteroaryl-substituted methane. Also,  $R_1$ - $R_6$ , which may be the same or different, are hydrogen, halogen, or alkyl, alkoxy, alkenyl, cycloalkyl, arylalkyl, acyl, or aryl, heteroaryl, alone or in combination. *See*, col. 8, ll. 49-54. The reference does not suggest nor provide guidance to the instant invention. In the instant invention  $R_7$  is nitrogen and  $R_2$  and  $R_5$  are heavy atoms selected from halogens. Thus, the rejection has been obviated.

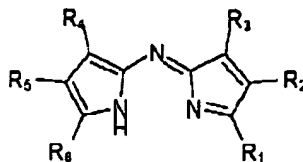
JP 11092479

The instant invention is patentable over the JP reference, JP 11-92479-A. The Japanese patent is drawn to an optical recording medium, which contains the aza pyrromethene metal chelate compound of formula (3).



Variables  $R_1$ - $R_6$  may independently represent hydrogen, halogen, alkyl, acyl, alkoxy, alkenyl, alkoxycarbonyl, aralkyl, aryl, or a heteroaryl group. *See*, JP 11-92479-A, ¶¶ [0010] and [0011], *see also*, [0007] and [0008]. In the “Embodiment of the Invention”

Section, the patent teaches the general formula (1) with a laundry list of R1-R14 substituents.



Further, Table 2 delineates compounds of Formula (3). See, ¶ [0034]. Compounds 3-1 to 3-13 do not render the instant invention obvious because in particular, there is not a specie wherein both R2 and R5 are halogens. The instant invention, in light of the specification teaches that invention is substituted at the R2 and R5 positions by heavy atoms, selected from halogens. Thus, the invention is not rendered obvious over JP 11-92479-A.

#### **B. Objections**

Claims 37-57 were object to as being dependent upon a rejected/objected based claim. The objections are obviated by the amendment.

### **III. EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

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Authorization for this examiner's amendment was given in a telephone interview with Johnathan O'Brien, Esquire on January 8, 2007 and January 9, 2007.

The application has been amended as follows:

1. In claim 27, DELETE "a heavy atom" and INSERT --- halogens,---after "selected from" on page 2 of 8, line 16 in the definition for R2 and R5.

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2. In claim 27, INSERT --- wherein said alkyl, cyclic, or heterocyclic moiety is --- after “an alkyl, cyclic, or heterocyclic moiety” in the definition for R2 and R5 on page 2 of 8, lines 16-17.
3. In claim 47, DELETE “a heavy atom” and INSERT --- halogens,---after “selected from” on page 4 of 8, line 16 in the definition for R2 and R5.
4. In claim 47, INSERT --- wherein said alkyl, cyclic, or heterocyclic moiety is --- after “an alkyl, cyclic, or heterocyclic moiety” in the definition for R2 and R5 on page 2 of 8, lines 16-17.

#### IV. REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: The instant invention is drawn to compounds and pharmaceutical compositions of formula (I) which are useful as photodynamic therapeutic agents. The instant invention appears to be free of the art of record. The closest prior art references of record are *Brinkley et al.*, US Patent 5,326,692 and (3) JP 11092479.

However the instant invention is anticipated nor rendered obvious in light of the references of record because the prior art references do not suggest the use of halogens in R2 and R5 position on the ring, nor does the reference fairly suggest that alkyls, cyclic or heterocyclic moieties substituted with at least one heavy atom.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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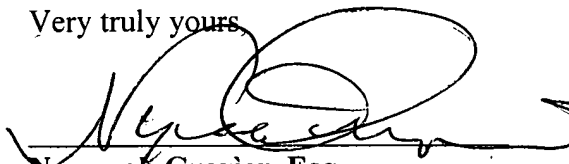
## VI. CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nyeemah Grazier whose telephone number is (571) 272-8781. The examiner can normally be reached on Monday through Thursday and every other Friday from 8:30 a.m. - 6:00 p.m.

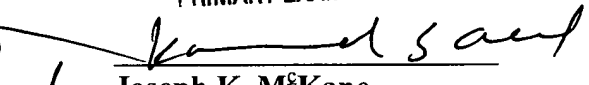
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. M<sup>re</sup>Kane, can be reached on (571) 272 - 0699. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Very truly yours,

  
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